3381 Cambie St. Unit 211, Vancouver, BC V5Z 4R3
salesgroup1@chipkin.com
Tel: +1 866 383 1657

FS-8705-30 – Vigilant VM-Series FACP By Edwards

DATASHEET – Rev 3

DESCRIPTION

This driver is suitable for all panels in the VM-Series panels.

This driver is capable of being linked with other FieldServer drivers to form regular FieldServer firmware that can be installed on QuickServer and other FieldServer gateways. When messages from the FACP are received, they are parsed and the internal data caches / arrays of the FieldServer are updated with status information. Other drivers can access this data and serve using other protocols such as BACnet and Modbus.

The driver is a passive client driver in that it does not poll for data but rather sits passively for the FACP to announce events.

CONNECTION FACTS

FIELDSERVER MODE	NODES	COMMENTS
Client	Many	One FACP per RS232 serial port. This driver supports networked FACP panels but can only have a connection to one per RS232 port.
Server	0	Not supported or documented.

FORMAL DRIVER TYPE

Serial RS232
Passive Client

COMPATIBILITY

FIELDSERVER MODEL	COMPATIBLE
FS-2010/2011/4010 (Legacy)	Yes
FS-35 Series	Yes
FS-QS Series	Yes

CONNECTION INFORMATION

Connection Type:	EIA232
Baud Rates:	Driver Supports: **9600**; 19200; 28800; 38400; 57600 Baud.
	FACP supports 9600
Data Bits:	Driver Supports: 7,**8**
Stop Bits:	Driver Supports: **1**,2
Parity:	Driver Supports: Odd, Even, **None**
Hardware Interface:	N/A
Multidrop Capability:	No

UNSUPPORTED DEVICES OR PROTOCOL OPTIONS

The driver is not capable of accepting (will cause errors) any (operator selected) FACP Report other than the All Active report which will be used for synchronization.
The driver is only capable of accepting event notifications.

The DTR Handshaking system is not supported. If enabled on the panel the pin must be jumpered to defeat the handshaking.

CDR3 is not supported.
Operator commands are ignored.
Driver cannot send commands to the FACP

DEVICES TESTED

DEVICE	TESTED (FACTORY, SITE)
Vigilant VM Panel	

HOW EVENT DATA IS STORED

Events fall into 6 Categories or Bins and 1 Summary Category.

	Event Types / Categories
1	Alarm
2	Supervisory
3	Trouble
4	Monitor
5	Hidden
6	Other
7	See Note below

The driver can be configured so that the any specific category can be monitored separately. This means that it is possible in the configuration to differentiate event types. Attaching a server object (of the other protocol) to each type. Thus, a configuration can focus on selected events, ignore some events or gather data for all event types.

The nature of the IO FACP is such that a user can expect that a point cannot only be active with one event type at a time. The IO FACP has its internal hierarchy of events such that, for example, if a device were in trouble state and an alarm becomes active, the point will transition from trouble to active.

A virtual event type category is provided to provide a summary.

	Event Types / Categories
	Not Normal
7	Set to 1 if any event type is not in its normal state. Else set to zero.

Device Data
Driver can be configured to monitor a range of devices for a particular Card on a particular panel. A server object can therefore be attached to each device on each card & panel that is part of the FACP.

Zone Data
Driver can be configured to monitor a range of zones. A server object can therefore be attached to each zone that is monitored.

Annunciator Data
Driver can be configured to monitor a range of Annunciator Addresses. A server object can therefore be attached to each Annunciator Address that is monitored.

System or Internal Data
Driver can be configured to monitor a range of Internal Events. A server object can therefore be attached to each Internal event that is monitored.

VM-Series Panel Capabilities
Gateway resource's limit maximum configurations. Gateways can support thousands of points, in some cases over 5k points. There are no limitations on the number of panels, cards, cards per panel, devices per card other than the total resource limitation.

CONFIGURATION EXAMPLES

Example 1 – Monitor only Active Event Type (ie alarms) for Device x on Panel X Card Y For each point ignore all other event types.

Eg. A server object for each

Panel X Card Y – Device X– Alarm

Example 3 – Monitor 3 key states for Device x on Panel X Card Y . For each point ignore all other event types. There will be 4 server object per device – one alarm/trbl/supervisory event types.

Eg. A server object for each

Panel X Card Y – Device X– Active
Panel X Card Y – Device X- Supervisory
Panel X Card Y – Device X- Trouble

Example 4 - Use a summary event for Device x on Panel X Card Y . For each point ignore all other event types. There will be 1 server object per device – one summary state

Eg. A server object for each

Panel X Card Y – Device X– Not-Normal

Example 5 – Maximum Configuration
Monitor all Event Types for Device x on Panel X Card Y . For each point ignore all other event types.
There will be 7 server object per device –6 basic and 1 summary
Monitor all zones, annunciator addresses and all system / internal states

Any subset is possible.

Eg. A server object for each point

Panel X Card Y – Device X– Alarm
Panel X Card Y – Device X- Supervisory
Panel X Card Y – Device X- Trouble
Panel X Card Y – Device X- Monitor
Panel X Card Y – Device X- Hidden
Panel X Card Y – Device X– Not-Normal
(7 server objects per point)

FACP – GATEWAY SYNCHRONIZATION

Event notices are sent once by the Panel. If the gateway restarts it will lose all data about any currently active states. Synchronization is required.

Synch will be done by human action of checking there are no active events on the panel and then re-starting the panel. This is required because after a system reset the panel does not re-send notices about events that were active before and which remain active after the reset.

The driver has been programmed to support the All Active Reports. When received, the gateway will clear all point data and use the Active Report data to mark points in Alarm.

FACP PRINTER PORT SUPERVISION

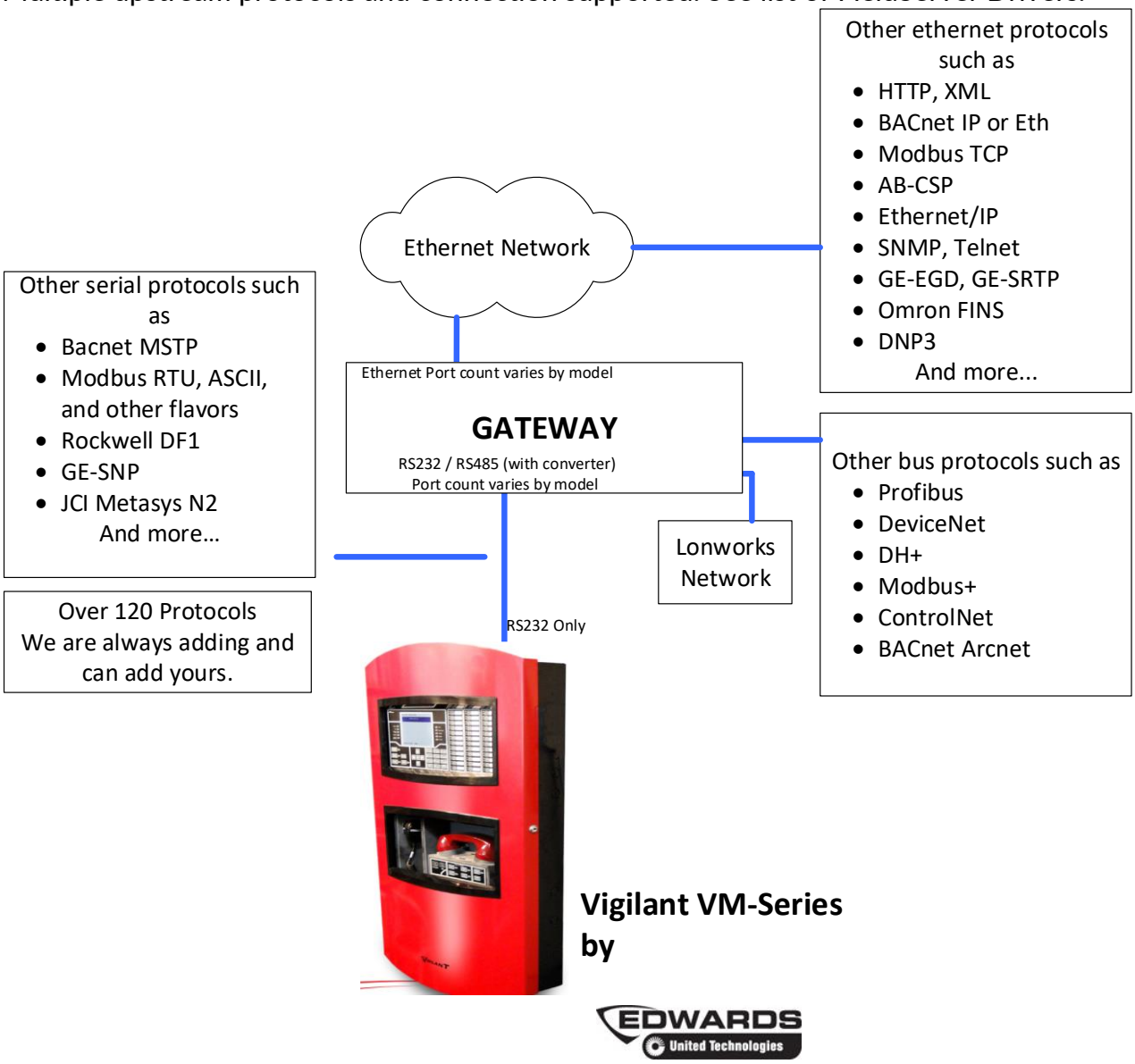
The DTR Handshaking system is not supported. If enabled on the panel the pin must be jumpered to defeat the handshaking.

If the FACP printer port has supervision enabled then the when it sends the ENQ the driver will respond with XON.

The driver has no way of knowing if the FACP connection has been lost. A point should be programmed to toggle on a time interval. The remote monitoring system should monitor this point for change.

CONNECTION CONFIGURATIONS

Multiple upstream protocols and connection supported. See list of FieldServer Drivers.



CUSTOMER SUPPORT

Edwards VM Panels Driver for FieldServer was developed by Chipkin, and we are proud to provide support for our products. For technical support, sales and customer service, please call us at 1 (866) 383-1657.

Thanks for choosing Chipkin's products and integration services to meet your building and industrial automation requirements!

Chipkin™ is a building and industrial automation protocol expert. We develop, configure, install and support gateways (protocol converters), data loggers and remote monitor and controlling applications. Founded in October 2000, Chipkin provides expert solutions for converting BACnet®, Modbus®, and LonWorks®—to name just a few—and enabling interfaces for HVAC, fire, siren, intercom, lighting, transportation and fuel systems. The high-quality products we offer (including those from other vendors) interface with Simplex™, Notifier™, McQuay™, GE™ and many others—so you can rest assured that we will select the most appropriate solution for your application.

With Chipkin you are buying a solution. Our configuration expertise in this field combined with free BACnet and other tools ensure your success; and our customer support via phone, email and remote desktop tools means that we are there when you need us. Chipkin is a small responsive company, and we live or die by the quality of our service—and with offices in two time zones—we can provide support when you need it. Give us a call now!

Sales and Customer Service

Toll Free: +1 866 383 1657
Email: salesgroup1@chipkin.com

REVISION HISTORY

DATE	RESP.	DRIVER VERSION	DOCUMENT REVISION	COMMENTS
6 Mar 2018	PMC	0.00	0	Created
7 Mar 2018	PMC	0.00	1	Added other panels – VS and FX Added notes about loop/device/module counts New Block Diagrams Updated notes on synch
3 Jan 2019	PMC	0.00	2	Send for review with quote
15 Jun 2021	YC	0.00	3	Updated to latest template